

FIGURE 1A

-243	TGACCTCGGGCAGGTCCTGGTGCAGAGCGTCGCCAAGGACGCCGAGAGGGAGGCGGGAT	-184
-183	TGCCCAGACATCCTTCAGCGAAGTGCAATGTGTGTTGTAAACCATCGTTGGCTGTCGGGA	-124
-123	GACCGGAGGACCGGTCCAGGCTGCCGGCGAGTCGAGGGCGAGGGAGAGGCCCGGTGAGT	-64
-63	GAGCAGAGTCCAGAGCCGTGCGCCCCCAGAACTGCGCGTCCGCCCCCGTGCAACCCCGCGC	-4
-3	GCCATGCCCCAGTTGCCCCCGCGCTCTGCTACGGGGCCCGCTCTCCATCATGGGCCCTCATG	57
58	CCGCTCACCAAGGAGGTGGCCAAAGGCAGCATCGGGCGCGGTGTGCTCCCCCGCGTGGAA	117
118	CTGGCCATCGAGCAGATCCGCAACGAGTCACCTCTGCGCCCCCTACTTCTCTCGACCTGCGG	177
178	CTCTATGACACGGAGTGCGACAACGCAAAAGGGTTGAAAGCCTTCTACGATGCGGATAAAA	237
238	TACGGGCCGAACCACTTGATGGTGTGGAGGCGTCTGTCCATCCGTCAATCCATCAT	297
298	GCAGAGTCCCTCCAAGGCTGGAATCTGGTGCAGCTTCTTTTGGCTGCAACACGCCCTGTT	357
358	CTAGCCGATAAGAAAAAATACCCCTTATTCTTTCGGACCGTCCCATCAGACAAATGCCGGTG	417
418	AATCCAGCCATTCTGAAGTTGCTCAAGCACTACCAGTGAAGCGCGTGGGCACGCTGACG	477
478	CAAGACGTTTCAGAGGTTCTCTGAGGTGCGGAATGACCTGACTGGAGTTCTGTATGGCGAG	537

**FIGURE 1B**

538 GACATTGAGATTTCAGACACCGAGAGCTTCTCCAACGATCCCTGTACCAGTGTCAAAAAG 597

598 CTGAAGGGGAATGATGTGCGGATCATCCTTGGCCAGTTTGACCAAGAATATGGCAGCAAAA 657

658 GTGTTCTGTGTCATACGAGGAGAACATGTATGGTAGTAAATATCAGTGGATCATTCGG 717

718 GGCTGGTACGAGCCTTCTTGGTGGGAGCAGGTGCACACGGAAAGCCAACTCATCCCGCTGC 777

778 CTCCGGAAGAACTCTGCTTGCTGCCATGGAGGGCTACATTTGGCGTGGATTTCGAGCCCCCTG 837

838 AGCTCCAAGCAGATCAAGACCATCTCAGGAAAGACTCCACAGCAGTATGAGAGAGAGTAC 897

898 AACAAACGCGGTACGGCGTGGGGCCAGCAAGTTCCACGGGTACGCCCTACGATGGCATC 957

958 TGGGTCAATCGCCAAAGACACTGCAGAGGGCCATGGAGACACTGCATGCCAGCAGCCGGCAC 1017

1018 CAGCGGATCCAGGACTTCAACTACACGGACCACACGCTGGGCAGGATCATCCTCAATGCC 1077

1078 ATGAACGAGACCAACTTCTTCGGGGTCACGGGTCAAGTTGTATTCCGGAAATGGGGAGAGA 1137

1138 ATGGGGACCATTAATTTACTCAATTTCAAGACACAGGGAGGTGAAGTGGGAGAGTAC 1197

1198 AACGCTGTGGCCGACACACTGGAGATCATCAATGACACCATCAGGTTCCAAGGATCCGAA 1257

1258 CCACCAAAGACAAGACCATCATCCTGGAGCAGCTGCGGAAGATCTCCCTACCTCTCTAC 1317

**FIGURE 1C**

1318 AGCATCCTCTCTGCCCTCACCATCCTCGGGATGATCATGGCCAGTGCTTTTCTCTTCTTC 1377

1378 AACATCAAGAACCGGAATCAGAAGCTCATAAAGATGTCGAGTCCATACATGAACAACCTT 1437

1438 ATCATCCTTGAGGGATGCTTTCCCTATGCTTCCATATTCTCTTTTGGCCTTGATGGATCC 1497

1498 TTTGTCTCTGAAAAGACCCTTTGAAACACTTTGCACCGTCAGGACCTGGATTCTCACCGTG 1557

1558 GGCTACACGACCGCTTTTGGGGCCATGTTTGCAAAGACCTGGAGAGTCCACGCCATCTTC 1617

1618 AAAAATGTGAAAAATGAAGAAGAAGATCATCAAGACCAGAAACTGCTTGTGATCGTGGG 1677

1678 GGCA TGCTGCTGATCGACCTGTGTATCCTGATCTGCTGGCAGGCTGTGGACCCCTGCCA 1737

1738 AGGACAGTGGAGAAGTACAGCATGGAGCCGGACCCAGCAGGACGGGATATCTCCATCCGC 1797

1798 CCTCTCCTGGAGCACTGTGAGAACACCCATATGACCATCTGGCTTGGCATCGTCTATGCC 1857

1858 TACAAGGGACTTCTCATGTTGTTCGGTTGTTTCTTAGCTTGGGAGACCCGCAACGTCAGC 1917

1918 ATCCCCGCACTCAACGACAGCAAGTACATCGGGATGAGTGTCTACAACGTGGGGATCATG 1977

1978 TGCATCATCGGGCCGCTGTCTCCTTCCCTGACCCGGGACCAGCCCAATGTGCAGTTCTGC 2037

2038 ATCGTGGCTCTGGTCATCATCTTCTGCAGCACCATCACCCCTCTGCCCTGGTATTCTGTGCCG 2097

**FIGURE 1D**

2098	AAGCTCATCACCCCTGAGAAACAAACCCAGATGCAGCAACGCAGAAACAGGCGATTCCAGTTC	2157
2158	ACTCAGAAATCAGAAAGAAAGATTCTAAACGTCACCTCGGTCAACAGTGTGAACCAA	2217
2218	GCCAGCACATCCCGCCTGGAGGGCCTACAGTCAGAAACCAATCGCCTGCGAATGAAGATC	2277
2278	ACAGAGCTGGATAAAGACTTGGAAGAGGTCAACCATGCAGCTGCAGGACACACAGAAAG	2337
2338	ACCACCTACATTAAACAGAACCACTACCAAGAGCTCAATGACATCCTCAACCTGGGAAAC	2397
2398	TTCACTGAGAGCACAGATGGAGGAAAGGCCATTTTAAATAATCACCTCGATCAAAATCCC	2457
2458	CAGCTACAGTGGAAACACAACAGAGCCCCCTCTCGAACATGCAAAGATCCTATAGAAGATATA	2517
2518	AACTCTCCAGAACACATCCAGCGTCGGCTGTCCCTCCAGCTCCCCCATCCTCCACCACGCC	2577
2578	TACCTCCCATCCATCGGAGGCGTGGACGCCAGCTGTGTCAAGCCCCCTGCGTCAGCCCCCACC	2637
2638	GCCAGCCCCCGCCACAGACATGTGCCACCCCTCCTTCCGAGTCATGGTCTCGGGCCTGTAA	2697
2698	GGGTGGAGGCCCTGGGCCCGGGGCCCTCCCCCGTGACAGAACCACTGCGGCAGAGGGGTC	2757
2758	TGCTGCAGAAACACTGTGCGCTCTGGCTGCGGAGAAAGCTGGGCACCATGGCTGGCCTCTC	2817
2818	AGGACCACTCGGATGGCACTCAGGTGGACAGGACGGGGCAGGGGAGACTTGGCACCTGA	2877

**FIGURE 1E**

2878	CCTCGAGCCCTTATTGTGAAGTCCTTATTCTTCACAAAGAGGAAACGGAAATGGGAC	2937
2938	GTCTTCCTTAACATCTGCAACAAGGAGCGCTGGGATATCAAACTTGCAAAAAA	2997
2998	AAAA	3001

FIGURE 2A

1	M	P	S	C	P	A	R	S	A	T	G	P	L	S	I	M	G	L	M	P	20
21	L	T	K	E	V	A	K	G	S	I	G	R	G	V	L	P	A	V	E	L	40
41	A	I	E	Q	I	R	N	E	S	L	L	R	P	Y	F	L	D	L	R	L	60
61	Y	D	T	E	C	D	N	A	K	G	L	K	A	F	Y	D	A	I	K	Y	80
81	G	P	N	H	L	M	V	F	G	G	V	C	P	S	V	T	S	I	I	A	100
101	E	S	L	Q	G	W	N	L	V	Q	L	S	F	A	A	T	T	P	V	L	120
121	A	D	K	K	K	Y	P	Y	F	F	R	T	V	P	S	D	N	A	V	N	140
141	P	A	I	L	K	L	L	K	H	Y	Q	W	K	R	V	G	T	L	T	Q	160
161	D	V	Q	R	F	S	E	V	R	N	D	L	T	G	V	L	Y	G	E	D	180
181	I	E	I	S	D	T	E	S	F	S	N	D	P	C	T	S	V	K	K	L	200
201	K	G	N	D	V	R	I	I	L	G	Q	F	D	Q	N	M	A	A	K	V	220
221	F	C	C	A	Y	E	E	N	M	Y	G	S	K	Y	Q	W	I	I	P	G	240

FIGURE 2B

241	W	Y	E	P	S	W	W	E	Q	V	H	T	E	A	N	S	S	R	C	L	260
261	R	K	N	L	L	A	A	M	E	G	Y	I	G	V	D	F	E	P	L	S	280
281	S	K	Q	I	K	T	I	S	G	K	T	P	Q	Q	Y	E	R	E	Y	N	300
301	N	K	R	S	G	V	G	P	S	K	F	H	G	Y	A	Y	D	G	I	W	320
321	V	I	A	K	T	L	Q	R	A	M	E	T	L	H	A	S	S	R	H	Q	340
341	R	I	Q	D	F	N	Y	T	D	H	T	L	G	R	I	I	L	N	A	M	360
361	N	E	T	N	F	F	G	V	T	G	Q	V	V	F	R	N	G	E	R	M	380
381	G	T	I	K	F	T	Q	F	Q	D	S	R	E	V	K	V	G	E	Y	N	400
401	A	V	A	D	T	L	E	I	I	N	D	T	I	R	F	Q	G	S	E	P	420
421	P	K	D	K	T	I	I	L	E	Q	L	R	K	I	S	L	P	L	Y	S	440
441	I	L	S	A	L	T	I	L	G	M	I	M	A	S	A	F	L	F	F	N	460
461	I	K	N	R	N	Q	K	L	I	K	M	S	S	P	Y	M	N	N	L	I	480

**FIGURE 2C**

481	I	L	G	G	M	L	S	Y	A	S	I	F	L	F	G	L	D	G	S	F	500
501	V	S	E	K	T	F	E	T	L	C	T	V	R	T	W	I	L	T	V	G	520
521	Y	T	T	A	F	G	A	M	F	A	K	T	W	R	V	H	A	I	F	K	540
541	N	V	K	M	K	K	K	I	I	K	D	Q	K	L	L	V	I	V	G	G	560
561	M	L	L	I	D	L	C	I	L	I	C	W	Q	A	V	D	P	L	R	R	580
581	T	V	E	K	Y	S	M	E	P	D	P	A	G	R	D	I	S	I	R	P	600
601	L	L	E	H	C	E	N	T	H	M	T	I	W	L	G	I	V	Y	A	Y	620
621	K	G	L	L	M	L	F	G	C	F	L	A	W	E	T	R	N	V	S	I	640
641	P	A	L	N	D	S	K	Y	I	G	M	S	V	Y	N	V	G	I	M	C	660
661	I	I	G	A	A	V	S	F	L	T	R	D	Q	P	N	V	Q	F	C	I	680
681	V	A	L	V	I	I	F	C	S	T	I	T	L	C	L	V	F	V	P	K	700
701	L	I	T	L	R	T	N	P	D	A	A	T	Q	N	R	R	F	Q	F	T	720



**FIGURE 2D**

721	Q	N	Q	K	K	E	D	S	K	T	S	T	S	V	T	S	V	N	Q	A	740
741	S	T	S	R	L	E	G	L	Q	S	E	N	H	R	L	R	M	K	I	T	760
761	E	L	D	K	D	L	E	E	V	T	M	Q	L	Q	D	T	P	E	K	T	780
781	T	Y	I	K	Q	N	H	Y	Q	E	L	N	D	I	L	N	L	G	N	F	800
801	T	E	S	T	D	G	G	K	A	I	L	K	N	H	L	D	Q	N	P	Q	820
821	L	Q	W	N	T	T	E	P	S	R	T	C	K	D	P	I	E	D	I	N	840
841	S	P	E	H	I	Q	R	R	L	S	L	Q	L	P	I	L	H	H	A	Y	860
861	L	P	S	I	G	G	V	D	A	S	C	V	S	P	C	V	S	P	T	A	880
881	S	P	R	H	R	H	V	P	P	S	F	R	V	M	V	S	G	L			898



**FIGURE 3B**

841	CCGGGATGGTACGAGCCTGCGTGGTGGGAGCAGGTGCATGTGGAGGCCAATTCCTCACGC	900
901	TGCTTGGCAGAGCCTCCTGGCTGCCATGGAAGTTACATCGGAGTGGACTTTGAGCCC	960
961	CTGAGCTCCAAAACAATCAAGACCATCTCAGGGAAGACTCCACAGCAGTATGAAAAGAGAG	1020
1021	TACAACAGCAAAACGTTCAGGCGTGGGGCCAGCAAGTTCCATGGGTACGCCCTACGATGGG	1080
1081	ATCTGGGTCAATCGCCAAAGACCCCTACAGAGGGCCATGGAGACACTGCATGCCAGTAGCAGG	1140
1141	CACCAGCGGATCCAGGACTTCAACTACACAGACCACACGCTGGGCCAAAATCATCTCTCAAT	1200
1201	GCCATGAACGAGACCAACTTCTTTCGGGGTCAACGGGTCAAAGTTGTGTTCGGGAACGGGGAG	1260
1261	AGAATGGGAACCATTAATAATTACTCAATTTCAAGACAGCAGAGAGTGAAGTTCGGCGAA	1320
1321	TACAACGCGGTGGCTGACACACTGGAGATCATCAATGACACCCATAAGGTTCCAGGGTCC	1380
1381	GAGCCACCCAAAGGACAAGACCATCATCTCTGGAGCAGCTTCGGAAGATCTCGCTTCCACTG	1440
1441	TATAGCATCCTGTCCGCTCTCACCATCCTCGGCATGATCATGGCCAGCGCCTTCCTCTTC	1500
1501	TTCAACATCAAGAACCGGAACCAAAAGCTGATTAAGATGTCAAGCCCCCTACATGAACAAC	1560
1561	CTCATCATCCTGGAGGAATGCTGTCTATGCATCCATCTTCTCTCTTTGGCCCTCGATGGG	1620
1621	TCCTTCGTCTCAGAAAAGACCTTTGAAACACTCTGCACGGTCCGGACCTGGATTCCTCACC	1680

FIGURE 3C

1681	GTGGGCTACACAACTGCCCTTTGGGGCCATGTTTGCAAAGACCTGGAGGGTCCATGCCATC	1740
1741	TTCAAAAATGTGAAGATGAAGAAGAAGATCATCAAAGACCAGAAGCTGCTTGTGATTGTG	1800
1801	GGGGGCATGCTGCTCATCGACCTGTGCATCCTGATCTGTGTGGCAGGCTGTGGACCCCTTG	1860
1861	CGGAGGACAGTAGAGAGGTACAGCATGGAGCCGGACCCAGCAGGCCGGGACATCTCCATC	1920
1921	CGCCCATTGCTGGAACACTGCGAAAACACCCACATGACCATCTGGCTTGGCATTTGCTAC	1980
1981	GCCTACAAGGGCTCCTCATGTCTATTTCGGTTGTTTCTTGGCATGGGAAACCCGCAATGTG	2040
2041	AGCATCCCTGCCCTCAACGACAGCAAGTACATCGGCATGAGTGTGTACAAATGTGGGGATC	2100
2101	ATGTGCATCATCGGGGCTGCTGTCTCTCTTCTGACGCGTGACCCAGCCCAACGTGCAGTTC	2160
2161	TGCATCGTGGCCCTGGTCAATCATCTTCTGCAGCACCACATCACTCTCTGCTGCTTGTGTG	2220
2221	CCAAAAGCTCATTAATCTGAGGACAAAACCCCTGACGCAGCCCACTCAGAAACAGGCGGTTCCAG	2280
2281	TTCACACAGAAACCAGAAAGAAAGATTTCGAAGACCTCCACTTCAGTCACCAGCGTGAAC	2340
2341	CAGGCGAGCACGTCACGCCCTGGAGGGACTGCAGTCAAGAAAACCCGCCCTTCGAATGAAG	2400
2401	ATCACAGAGCTGGACAAAAGACTTGGGAAGAAGTCAACCATGCAGCTACAAGACACACCAGAG	2460
2461	AAGACCACATACATCAAAACAGAATCACTACCAAGAGCTCAACGACATCCTCAGCTTGGGC	2520

FIGURE 3D

2521	AACTTCACAGAGACAGATGGAGGAAAGGCCATTCTAAAAATCACCTCGATCAAAAC	2580
2581	CCCCAGCTCCAGTGGAAACACGACAGAGCCCCTCAAGAACATGCAAAGACCCCATAGAAGAC	2640
2641	ATCAACTCCCCGGAGCACATCCAGCGCCGGCTGTGCTCCAGCTCCCCCATCCTTCACCCAC	2700
2701	GCCTACCTCCCCATCCGAGGGGTGGATGCCAGCTGCCGTGAGCCCCCTGTGTGTCAGCCCCT	2760
2761	ACCGCCAGCCCCTCGCCACAGACACGTACCAACCTCCTTCCGAGTCATGGTCTCGGGCCTG	2820
2821	<u>TAG</u>	2823

FIGURE 4A

1	M	A	S	P	P	S	S	G	Q	P	R	P	P	P	P	P	P	P	A	20
21	R	L	L	P	L	L	L	L	S	L	L	L	W	L	A	P	G	A	W	40
41	W	T	R	G	A	P	R	P	P	P	S	S	P	P	L	S	I	M	G	60
61	M	P	L	T	K	E	V	A	K	G	S	I	G	R	G	V	L	P	A	80
81	E	L	A	I	E	Q	I	R	N	E	S	L	L	R	P	Y	F	L	D	100
101	R	L	Y	D	T	E	C	D	N	A	K	G	L	K	A	F	Y	D	A	120
121	K	Y	G	P	N	H	L	M	V	F	G	G	V	C	P	S	V	T	S	140
141	I	A	E	S	L	Q	G	W	N	L	V	Q	L	S	F	A	A	T	T	160
161	V	L	A	D	K	K	K	Y	P	Y	F	F	R	T	V	P	S	D	N	180
181	V	N	P	A	I	L	K	L	L	K	H	F	R	R	W	R	R	V	G	200
201	T	Q	D	V	Q	R	F	S	E	V	R	N	D	L	T	G	V	L	Y	220
221	E	D	I	E	I	S	D	T	E	S	F	S	N	D	P	C	T	S	V	240
241	K	L	K	G	N	D	V	R	I	I	L	G	Q	F	D	Q	N	M	A	260

FIGURE 4B

261	K	V	F	C	C	A	F	E	E	S	M	F	G	S	K	Y	Q	W	I	I	280
281	P	G	W	Y	E	P	A	W	E	Q	V	H	V	E	A	N	S	S	R	300	
301	C	L	R	R	S	L	L	A	A	M	E	G	Y	I	G	V	D	F	E	P	320
321	L	S	S	K	Q	I	K	T	I	S	G	K	T	P	Q	Q	Y	E	R	E	340
341	Y	N	S	K	R	S	G	V	G	P	S	K	F	H	G	Y	A	Y	D	G	360
361	I	W	V	I	A	K	T	L	Q	R	A	M	E	T	L	H	A	S	S	R	380
381	H	Q	R	I	Q	D	F	N	Y	T	D	H	T	L	G	K	I	I	L	N	400
401	A	M	N	E	T	N	F	F	G	V	T	G	Q	V	V	F	R	N	G	E	420
421	R	M	G	T	I	K	F	T	Q	F	Q	D	S	R	E	V	K	V	G	E	440
441	Y	N	A	V	A	D	T	L	E	I	I	N	D	T	I	R	F	Q	G	S	460
461	E	P	P	K	D	K	T	I	I	L	E	Q	L	R	K	I	S	L	P	L	480
481	Y	S	I	L	S	A	L	T	I	L	G	M	I	M	A	S	A	F	L	F	500
501	F	N	I	K	N	R	N	Q	K	L	I	K	M	S	S	P	Y	M	N	N	520
521	L	I	I	L	G	G	M	L	S	Y	A	S	I	F	L	F	G	L	D	G	540

## FIGURE 4C

541	S	F	V	S	E	K	T	F	E	T	L	C	T	V	R	T	W	I	L	T	560
561	V	G	Y	T	A	F	G	A	M	F	A	K	T	W	R	V	H	A	I	580	
581	F	K	N	V	K	M	K	K	I	I	K	D	Q	K	L	L	V	I	V	600	
601	G	G	M	L	L	I	D	L	C	I	L	I	C	W	Q	A	V	D	P	L	620
621	R	R	T	V	E	R	Y	S	M	E	P	D	P	A	G	R	D	I	S	I	640
641	R	P	L	L	E	H	C	E	N	T	H	M	T	I	W	L	G	I	V	Y	660
661	A	Y	K	G	L	L	M	L	F	G	C	F	L	A	W	E	T	R	N	V	680
681	S	I	P	A	L	N	D	S	K	Y	I	G	M	S	V	Y	N	V	G	I	700
701	M	C	I	I	G	A	A	V	S	F	L	T	R	D	Q	P	N	V	Q	F	720
721	C	I	V	A	L	V	I	I	F	C	S	T	I	T	L	C	L	V	F	V	740
741	P	K	L	I	T	L	R	T	N	P	D	A	A	T	Q	N	R	R	F	Q	760
761	F	T	Q	N	Q	K	K	E	D	S	K	T	S	T	S	V	T	S	V	N	780
781	Q	A	S	T	S	R	L	E	G	L	Q	S	E	N	H	R	L	R	M	K	800
801	I	T	E	L	D	K	D	L	E	E	V	T	M	Q	L	Q	D	T	P	E	820



FIGURE 4D

821	K	T	T	Y	I	K	Q	N	H	Y	Q	E	L	N	D	I	L	S	L	G	840
841	N	F	T	E	S	T	D	G	G	K	A	I	L	K	N	H	L	D	Q	N	860
861	P	Q	L	Q	W	N	T	T	E	P	S	R	T	C	K	D	P	I	E	D	880
881	I	N	S	P	E	H	I	Q	R	R	L	S	L	Q	L	P	I	L	H	H	900
901	A	Y	L	P	S	I	G	G	V	D	A	S	C	V	S	P	C	V	S	P	920
921	T	A	S	P	R	H	R	H	V	P	P	S	F	R	V	M	V	S	G	L	940

FIGURE 5A

1	M	P	S	C	P	A	R	S	A	T	G	P	L	S	I	M	G	L	M	P	20
21	L	T	K	E	V	A	K	G	S	I	G	R	G	V	L	P	A	V	E	L	40
41	A	I	E	Q	I	R	N	E	S	L	L	R	P	Y	F	L	D	L	R	L	60
61	Y	D	T	E	C	D	N	A	K	G	L	K	A	F	Y	D	A	I	K	Y	80
81	G	P	N	H	L	M	V	F	G	G	V	C	P	S	V	T	S	I	I	A	100
101	E	S	L	Q	G	W	N	L	V	Q	L	S	F	A	A	T	T	P	V	L	120
121	A	D	K	K	K	Y	P	Y	F	F	R	T	V	P	S	D	N	A	V	N	140
141	P	A	I	L	K	L	L	K	H	Y	Q	W	K	R	V	G	T	L	T	Q	160
161	D	V	Q	R	F	S	E	V	R	N	D	L	T	G	V	L	Y	G	E	D	180
181	I	E	I	S	D	T	E	S	F	S	N	D	P	C	T	S	V	K	K	L	200
201	K	G	N	D	V	R	I	I	L	G	Q	F	D	Q	N	M	A	A	K	V	220
221	F	C	C	A	Y	E	E	N	M	Y	G	S	K	Y	Q	W	I	I	P	G	240
241	W	Y	E	P	S	W	W	E	Q	V	H	T	E	A	N	S	S	R	C	L	260
261	R	K	N	L	L	A	A	M	E	G	Y	I	G	V	D	F	E	P	L	S	280
281	S	K	Q	I	K	T	I	S	G	K	T	P	Q	Q	Y	E	R	E	Y	N	300
301	N	K	R	S	G	V	G	P	S	K	F	H	G	Y	A	Y	D	G	I	W	320

FIGURE 5B

321	V	I	A	K	T	L	Q	R	A	M	E	T	L	H	A	S	S	R	H	Q	340
341	R	I	Q	D	F	N	Y	T	D	H	T	L	G	R	I	I	L	N	A	M	360
361	N	E	T	N	F	F	G	V	T	G	Q	V	V	F	R	N	G	E	R	M	380
381	G	T	I	K	F	T	Q	F	Q	D	S	R	E	V	K	V	G	E	Y	N	400
401	A	V	A	D	T	L	E	I	I	N	D	T	I	R	F	Q	G	S	E	P	420
421	P	K	D	K	T	I	I	L	E	Q	L	R	K	I	S	L	P	L	Y	S	440
441	I	L	S	A	L	T	I	L	G	M	I	M	A	S	A	F	L	F	F	N	460
461	I	K	N	R	N	Q	K	L	I	K	M	S	S	P	Y	M	N	N	L	I	480
481	I	L	G	G	M	L	S	Y	A	S	I	F	L	F	G	L	D	G	S	F	500

FIGURE 5C

501 V S E K T F E T L C T V R T W I L T V G 520

521 Y T A F G A M F A K T W R V H A I F K 540

541 N V K M K K I I K D Q K L L V I V G G 560

561 M L L I D L C I L I C W Q A V D P L R R 580

581 T V E K Y S M E P D P A G R D I S I R P 600

601 L L E H C E N T H M T I W L G I V Y A Y 620

621 K G L L M L F G C F L A W E T R N V S I 640

FIGURE 5D

641	P	A	L	N	D	S	K	Y	I	G	M	S	V	Y	N	V	G	I	M	C	660
661	I	I	G	A	A	V	S	F	L	T	R	D	Q	P	N	V	Q	F	C	I	680
681	V	A	L	V	I	I	F	C	S	T	I	T	L	C	L	V	F	V	P	K	700
701	L	I	T	L	R	T	N	P	D	A	A	T	Q	N	R	R	F	Q	F	T	720
721	Q	N	Q	K	K	L	E	S	K	T	S	E	N	S	H	L	V	M	Q	A	740
741	S	T	S	R	L	E	G	L	Q	S	E	N	Q	V	R	Q	M	K	I	T	760
761	E	L	D	K	K	E	E	E	V	T	M	Q	L	L	D	P	P	E	K	T	780
781	T	Y	I	K	Q	N	H	Y	Q	E	L	N	N	I	L	N	L	G	N	F	800
801	T	E	S	T	D	G	G	K	A	I	L	K	C	H	D	P	Q	N	P	Q	820
821	L	Q	W	N	T	T	E	P	S	R	T	Q	L	I	L	I	E	D	I	N	840
841	S	P	E	H	I	Q	R	L	A	S	L	Q	V	P	P	C	H	A	Y	A	860
861	L	P	S	I	G	G	V	D	A	S	C	V	R	S	V	V	S	P	T	A	880
881	S	P	R	H	R	H	V	P	P	S	F	R	V	M	V	S	G	L			898

Figure 6A

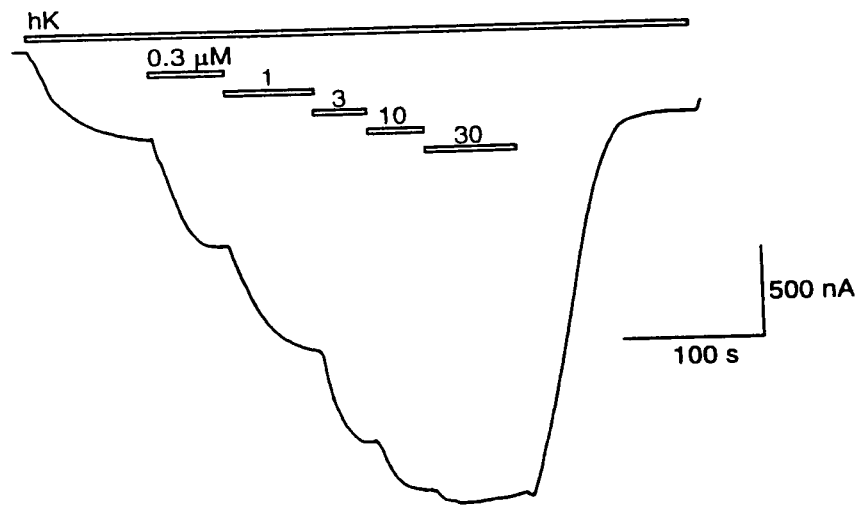


Figure 6B

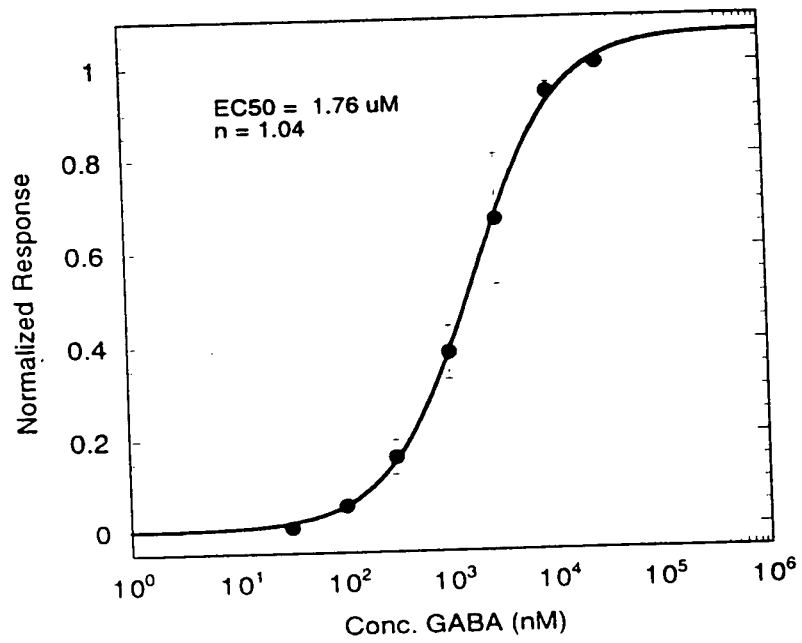
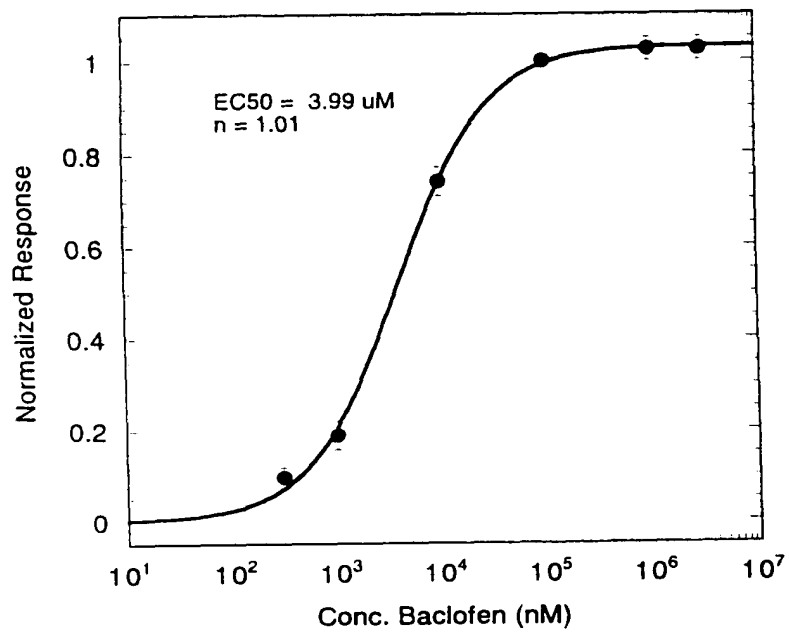


Figure 7



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Figure 8

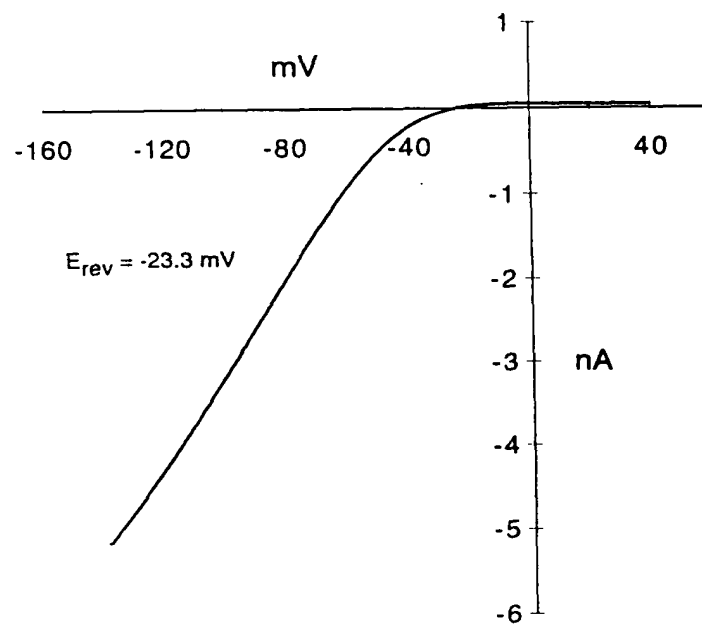




Figure 9A

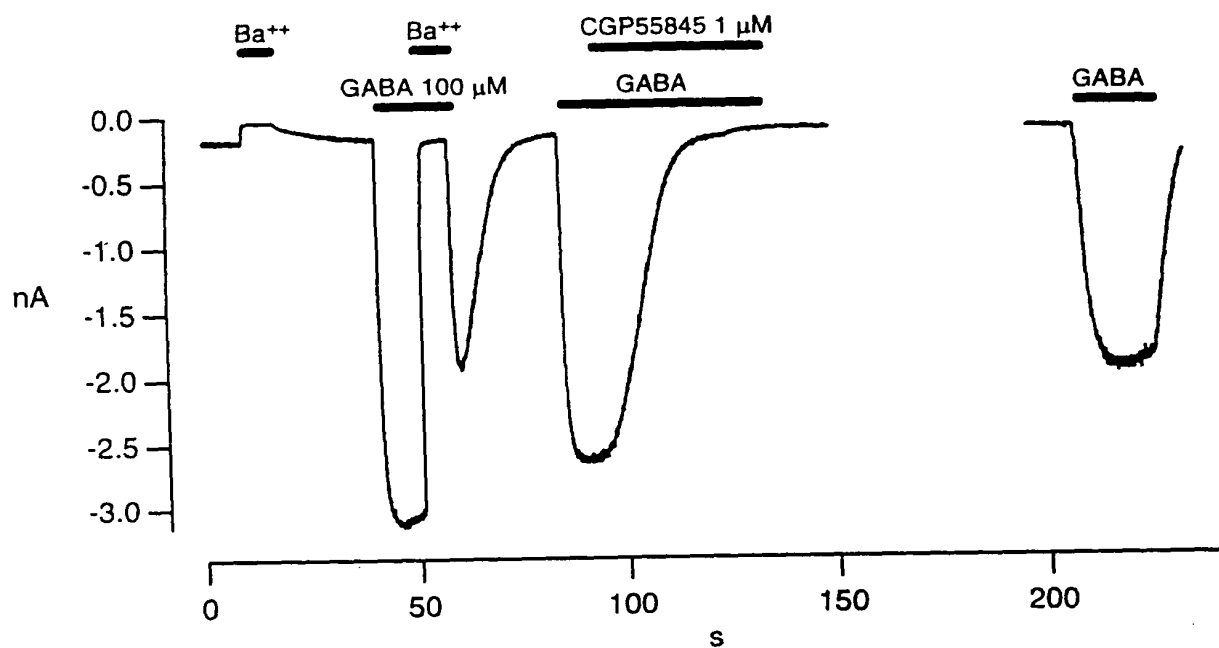


Figure 9B

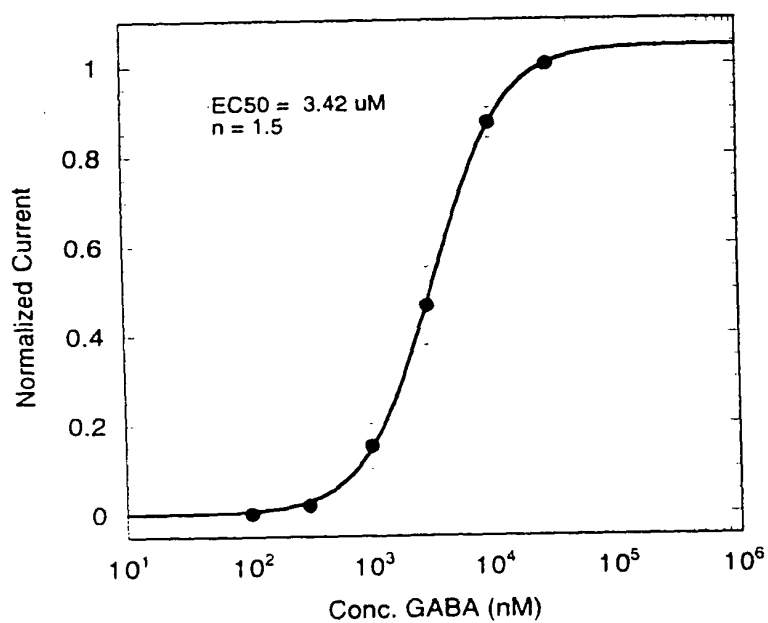


Figure 10

rGABA <sub>B</sub> R2	MASPPSSGQPRPPPPARLLPLLLSLLLWAPGAWGTRGAPRPPSPSP...LSIMGLMPLTK	65
rGABA <sub>B</sub> R1b	.....MGPGGCTPVGWPLPLLLVMAAGVAPVWASHPHLPRPHPRVPPHPSSERRAVYIGALFP	60
rGABA <sub>B</sub> R2	EVAKGSICRGVLPAVELAEIQIRN.ESLLRPYFLDLRLYDTECDNAKGLKAFYDAIKYGNHLMVFGVC	134
rGABA <sub>B</sub> R1b	MSGGWPGQACQPAVENALEDVNSRRDILPDYELKLIHHDSCDQATKYLYELLYNDPIKILLMPG.C	129
rGABA <sub>B</sub> R2	PSVTSITAESLQGNLVQLSFAATTPVLADKKKYPYFFRTVPSDNVAVNPAILKLLKHFRRRVGTLTQDV	204
rGABA <sub>B</sub> R1b	SSVSTLVAEAAARMNLIIVLSYGSSSPALSNRQRPFFRTHPSATLHNPTRVKLFKKGWKKIATIQTT	199
rGABA <sub>B</sub> R2	QRFSEVRNDLTGVLYGEDIEISDTESFSNDPCTSVKKLKGNDVRIILQFDQNMMAKVFCAPFEESMFGS	274
rGABA <sub>B</sub> R1b	EVFTSTLDDLEERVKEAGIEITFRQSFFSDPAVPVKNLKRQDARIIVGLFYETEARKVFCEVYKERLFGK	269
rGABA <sub>B</sub> R2	KYQWIIIPGWYEPAWWEQVHVEANSRCLRRSLLAMEGYIGVDFEPLSSQIKTISGKTQQYEREYNSK	344
rGABA <sub>B</sub> R1b	KYVWFLIGWYADNWFXYDPSIN...CTVEEMTEAVEGHIITTEIVMLNPANTRSI SNMTSQEFV.EKLTk	335
rGABA <sub>B</sub> R2	RSVGGPSKFGHY....AYDGIWIAKTQORAMETLHASSRHORIQDFNYTDHTLGIILNAMNETNFFG	409
rGABA <sub>B</sub> R1b	RLKRHPETGGFQEAFLAYDAIWAALALALNKTSGGGRSG..VRLEDFNYNQTTITDQIYRAMNSSSFEg	403
rGABA <sub>B</sub> R2	VTQGVVF.RNGERMGTIKFTQFQDSREVKVGEYNAVADTLEIINDTIRFGSEPPKDKTIIIEQLRKISL	478
rGABA <sub>B</sub> R1b	VSGHVFDASGRMAWTLIEQLQGSYKKIGYDSTKDDLS.WSKTDKIGGSPPADQTLVTKTFRFLSQ	472
rGABA <sub>B</sub> R2	PLYSILSALTILGMINASAFLEFFNIKNRNQKLIKMSPPYMNLIILGMLSYASIFLFGLDGSFVSEKTF	548
rGABA <sub>B</sub> R1b	KLFISVSVLSSLGIVLAVVCLSFNIYNSHVRYIQNSQPNLNLTAVGCSLALAAVPLGLDGYHIGRSQF	542
rGABA <sub>B</sub> R2	ETLCTVTRTWILTGYTTAFGAMFAKTWRVHAIFKNVMMKK...KIIDQKLLVIVGGMLLIDLICILCWQ	615
rGABA <sub>B</sub> R1b	PFVCQARLWLLGLGFSIGYGSMTKIWMVHTVFTKKEKKEWRKTELPWKLYATVGLLVGMDVLTIAIWQ	612
rGABA <sub>B</sub> R2	AVDPLRRTVERYSMEDPDAGRDISIRPLLEHCENTHMTIWLGIYVAYKGLMLFGCFLAWETRNVSIPAL	685
rGABA <sub>B</sub> R1b	IVDPLHRTIETFAKEPKEDIDVSILPQLEHCSSKKMNTWLGIFYGYKGLLLLLGIFLAYETKSVSTEKI	682
rGABA <sub>B</sub> R2	NDSKYIGMSVYVNVGIMCIIGAAVSFLTRDQPNVQFCIVALVIFCSTITLCLVFVPKLIITLRNPDATQ	755
rGABA <sub>B</sub> R1b	NDHRAVGMAIYNVAVLCLITAPVTMILSSQDAAFAFAFLAIVFSSYITLVVLFVPKMRRLITRGE...	748
rGABA <sub>B</sub> R2	NRRFQFTQNOKKEDSKTSTSVTSVNAQASTSRLEGLQSENHRLMKITELDKDLEEVTMQLQDTPKTTYI	825
rGABA <sub>B</sub> R1b	.....WQSETQDTMKTGSS.TNNNEEEKSRL...LEKENRELEKIIAEKEERVSELRHQLQSRQQLRSRR	809
rGABA <sub>B</sub> R2	KQNHVQELNDILSLGNFTESTDGKAILKNHLDQNPQLQWNTPEPSRTCKDPIEDINSPEHIQRRRLSLQL	895
rGABA <sub>B</sub> R1b	HPPTPPDPSGGLPRGSEPPDRLSCDGSRVHLLYK*.....	845
rGABA <sub>B</sub> R2	PILHHAYLPSIGGVDAVCVSPCVPTASPRHRHVPPSFRVMVSGL*.....	940

Figure 11A



Figure 11B



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Figure 11C



Figure 11D



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Figure 12A



Figure 12B



Figure 13A

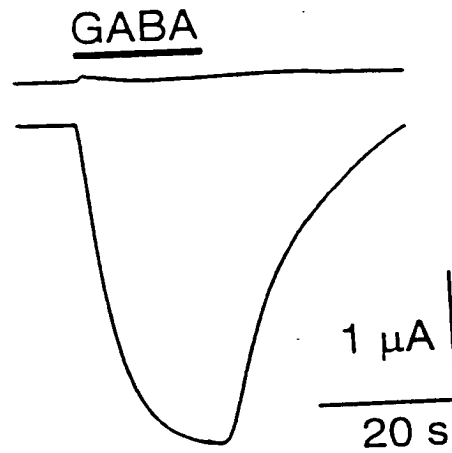


Figure 13B

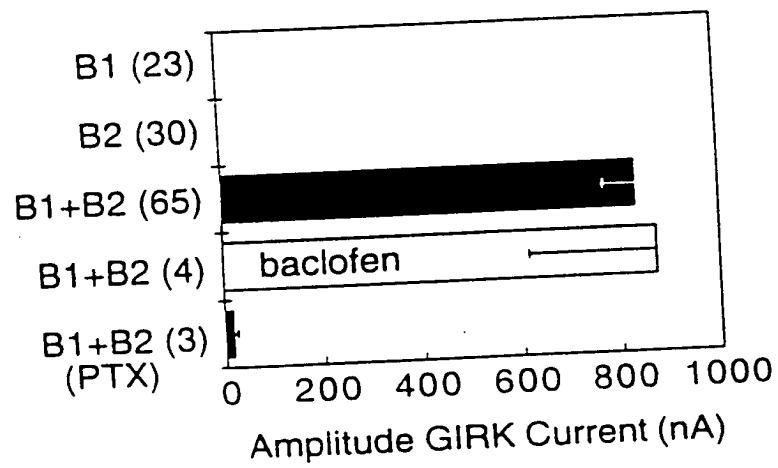


Figure 14A

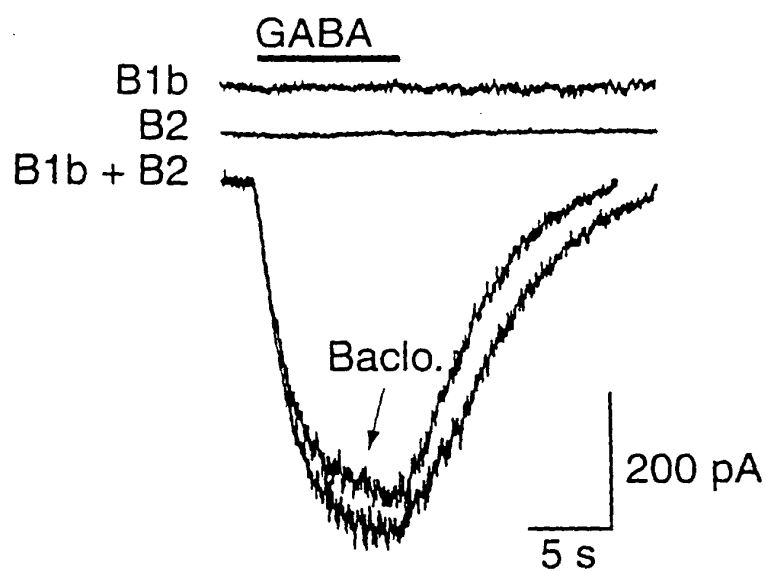


Figure 14B

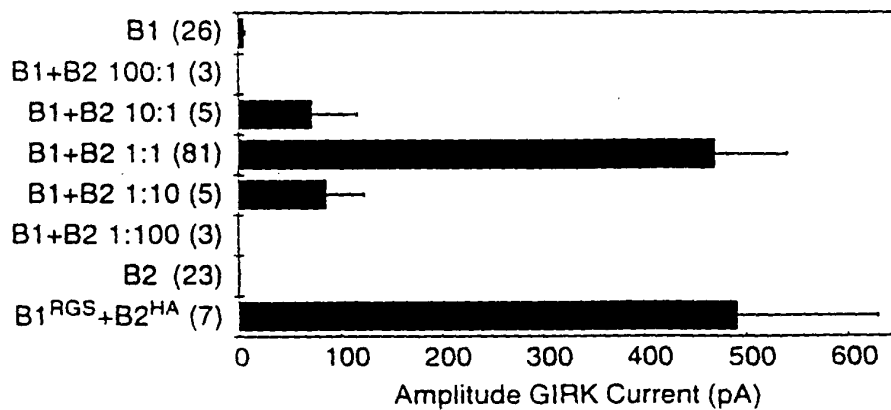


Figure 15A

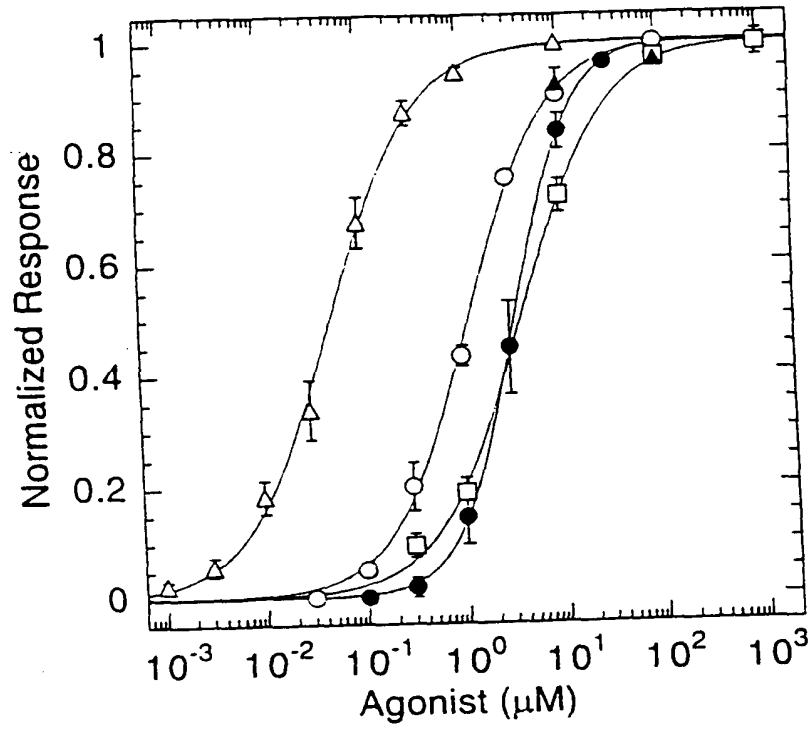


Figure 15B

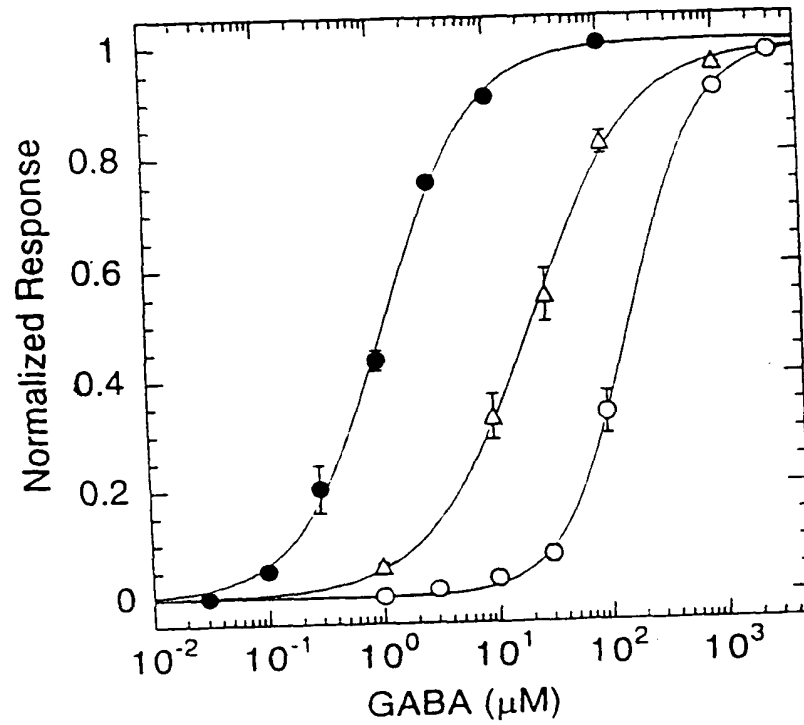




Figure 16

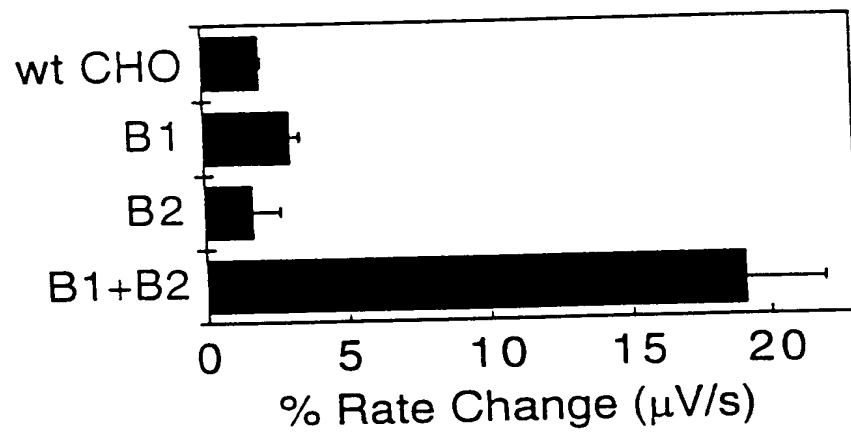


Figure 17A



Figure 17B



Figure 17C



Figure 17D



Figure 18A



Figure 18B

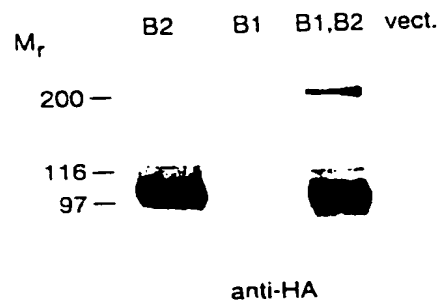


Figure 18C



Silver grain density:

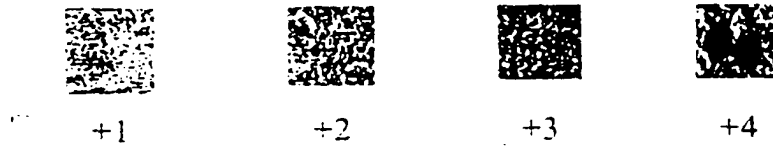


FIGURE 19A



FIGURE 19B

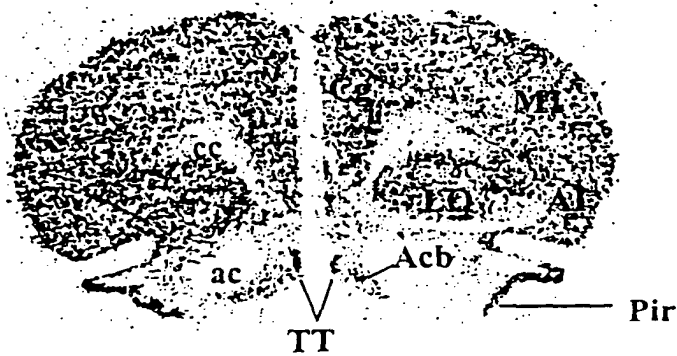
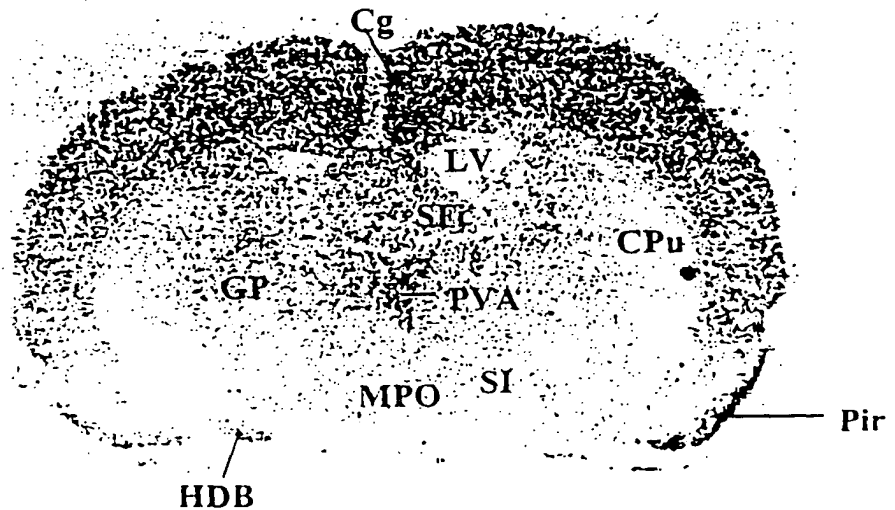


FIGURE 19C



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FIGURE 19D

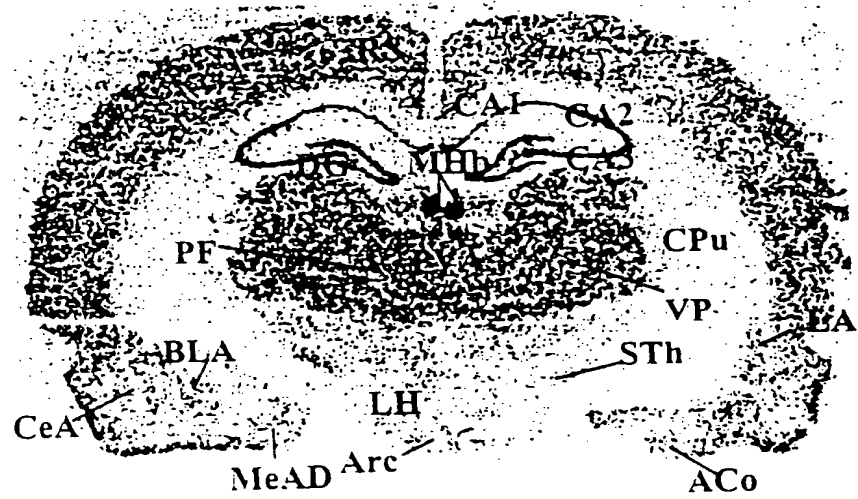


FIGURE 19E

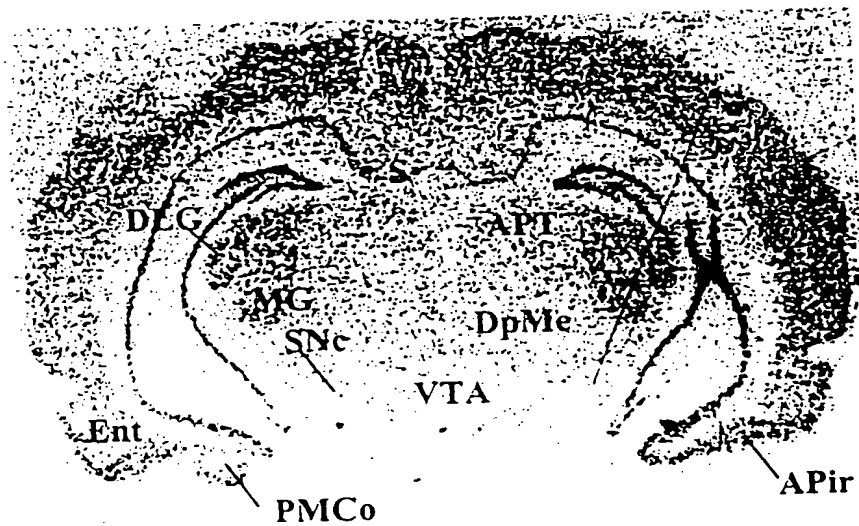
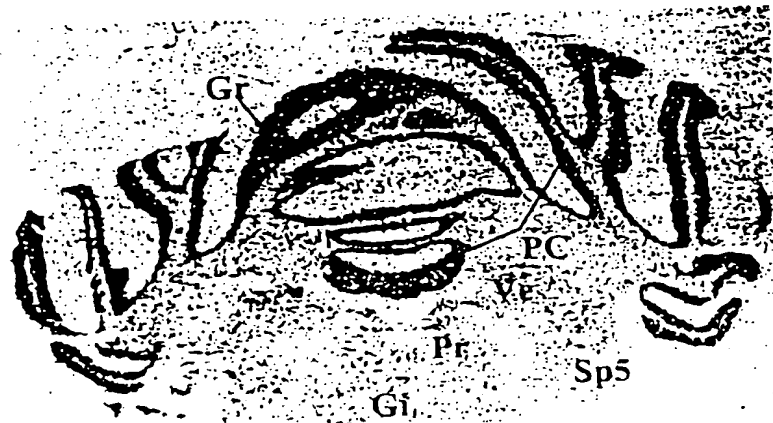


FIGURE 19F



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FIGURE 19G

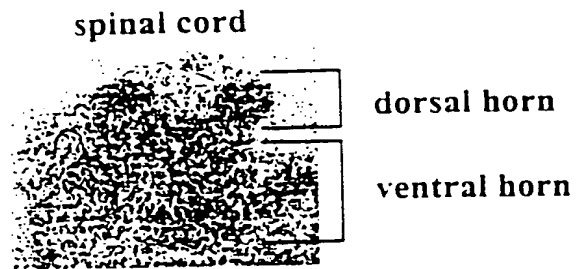


FIGURE 19H

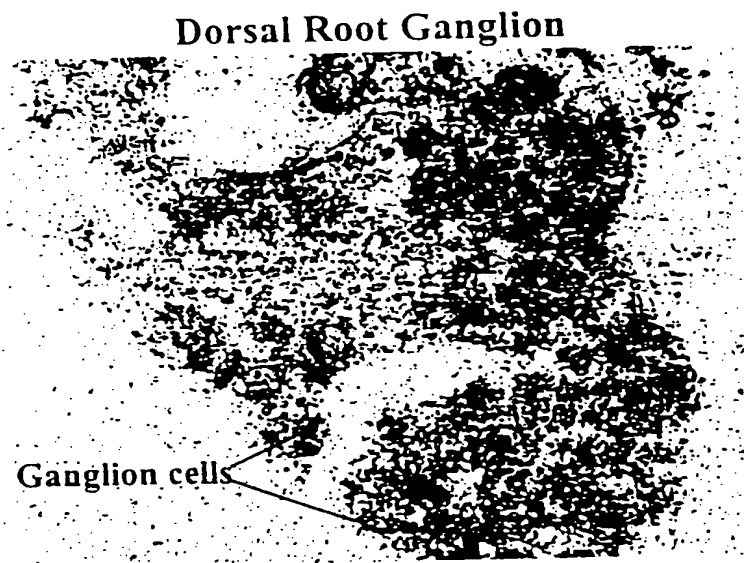
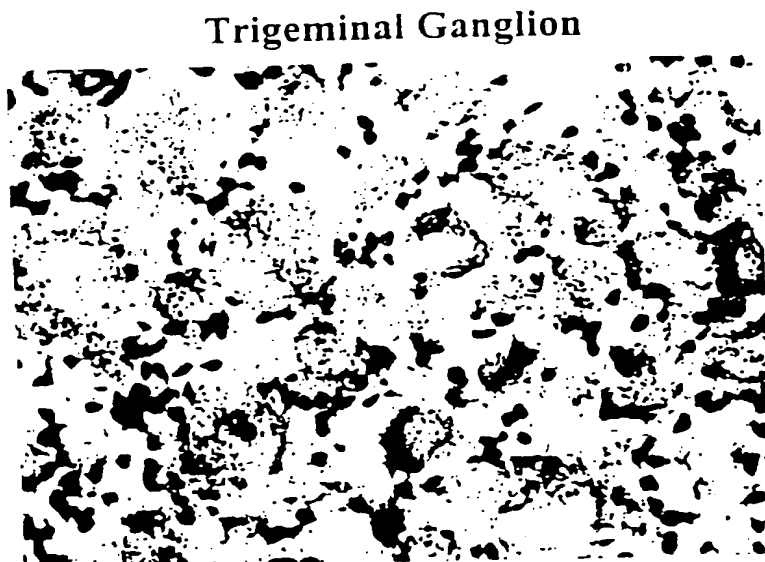


FIGURE 19I



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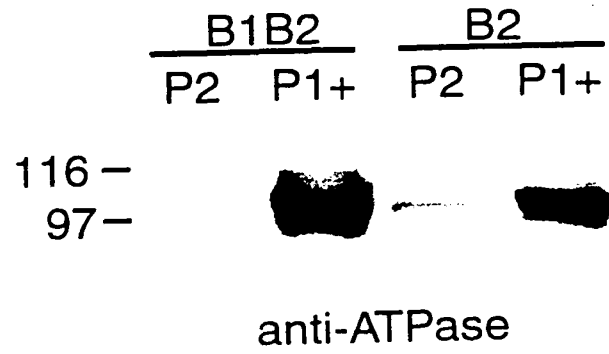
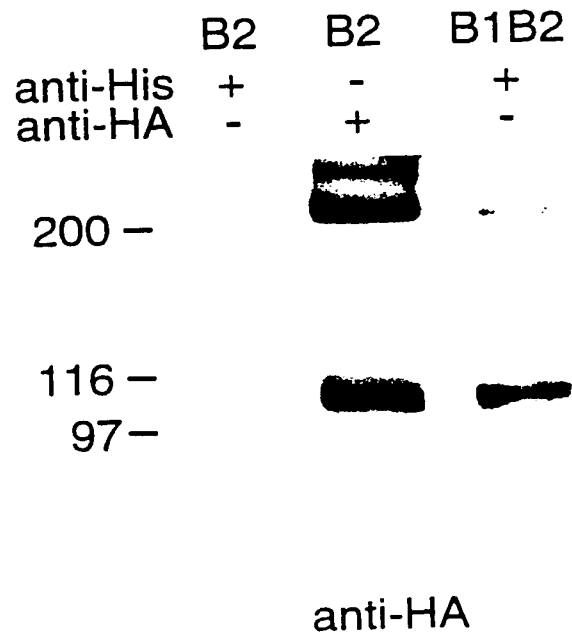
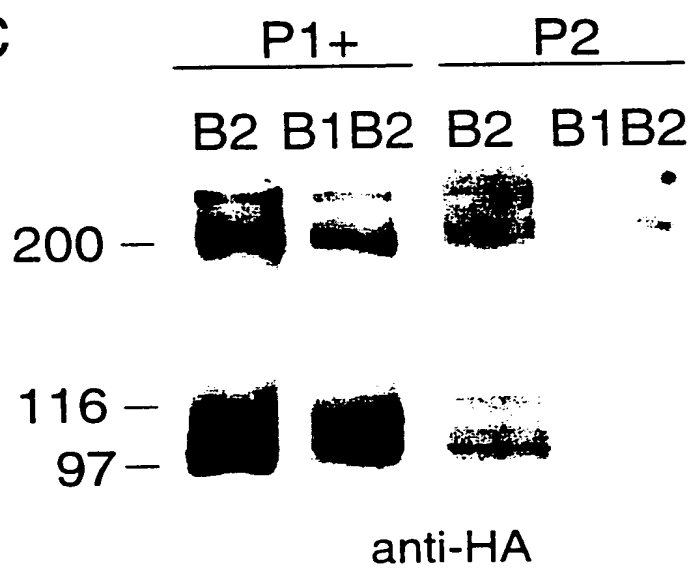
**Figure 20A****Figure 20B**

Figure 20C





**Figure 21A**



**Figure 21B**



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865221 5521260

**Figure 21C**

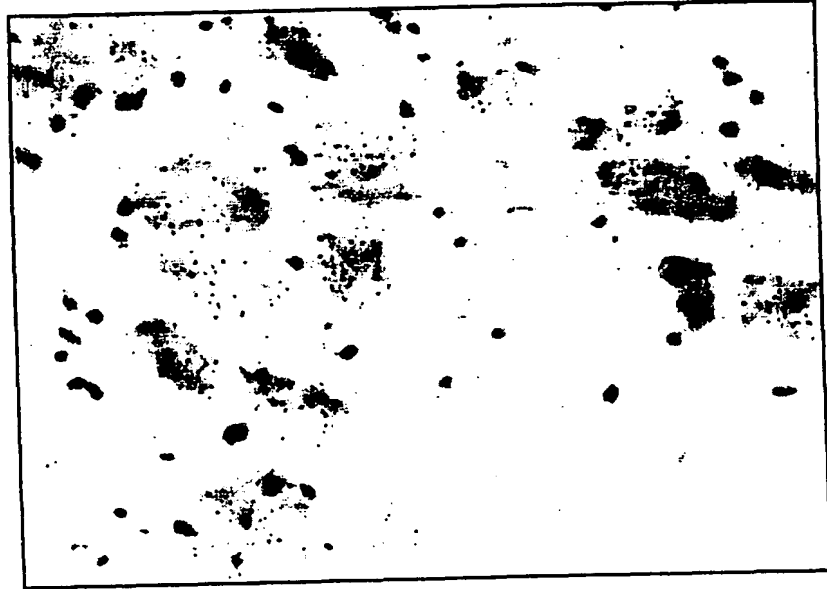


**Figure 21D**



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**Figure 21E**



**Figure 21F**



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00011755-121598

FIGURE 22A

1	ATGGCTTCCCCGGAGCTCCGGGAGCCCCGGCCCGCCGCGCCACCGCCGCC	60
61	GCGCGCCTGCTACTGCTACTGCTGCCGCTGCTGCTGCCCTCTGGCGCCCGGGCCTGG	120
121	GGCTGGGCGCGGGCGCCCCCGCCCGCCAGCAGCCCCGCGCTCTCCATCATGGGC	180
181	CTCATGCCGCTCACCAAGGAGGTGGCCAAGGGCAGCATCGGGCGCGGTGTGCTCCCCGCC	240
241	GTGGAACCTGGCCATCGAGCAGATCCGCCAACGAGTCACTCCTGCGCCCCCTACTTCTCTCGAC	300
301	CTGCGGCTCTATGACACGGAGTGCGGACAAACGCAAAAGGTTGAAAGCCTTCTACGATGCG	360
361	ATAAAATACGGGCCGAACCACTTGATGGTGTTTGGAGGCGTCTGTCCATCCGTCACATCC	420
421	ATCATTGCAGAGTCCCTCCAAAGGCTGGAATCTGGTGCAGCTTTCTTTTGCTGCAACCACG	480
481	CCTGTTCTAGCCGATAAGAAAAAATACCCTTATTTCTTCGGACCGTCCCATCAGACAAT	540
541	GCGGTGAATCCAGCCATTCTGAAGTTGCTCAAGCACTACCAGTGGAAGCGGTGGGCACG	600
601	CTGACGCAAGACGTTACAGAGGTTCTCTGAGGTGCGGAATGACCTGACTGGAGTTCTGTAT	660
661	GGCGAGGACATTGAGATTTACAGACACCGAGAGCTTCTCCAACGATCCCTGTACCAGTGTC	720
721	AAAAAGCTGAAGGGGAATGATGTGCGGATCATCCTTGGCCAGTTTGACCAGAAATATGGCA	780
781	GCAAAAGTGTCTGTTGTCATACGAGGAGAAACATGTATGGTAGTAAATATCAGTGGATC	840

**FIGURE 22B**

841	ATTCCGGGCTGTTACGAGCCTTCTTGGTGGGAGCAGGTGCACACGGAAGCCAACTCATCC	900
901	CGCTGCCCTCCGGAAGAAATCTGCTTGCTGCCATGGAGGGCTACATTGGCGTGGAATTTCCGAG	960
961	CCCCTGAGCTCCAAGCAGATCAAGACCATCTCAGGAAAGACTCCACAGCAGTATGAGAGA	1020
1021	GAGTACAACAACAAGCGGTCAGGCGTGGGGCCCCAGCAAGTTCCACGGGTACGCCCTACGAT	1080
1081	GGCATCTGGGTCAATCGCCAAAGACACTGCAGAGGGCCCATGGAGACACTGCATGCCAGCAGC	1140
1141	CGGCACCAGCGGATCCAGGACTTCAACTACACGGACCACACGCTGGGCAGGATCATCCTC	1200
1201	AATGCCATGAACGAGACCAACTTCTTCGGGGTCACGGGTCAAGTTGTATTCCGGAATGGG	1260
1261	GAGAGAATGGGACCATTAAATTACTCAATTTCAGACAGCAGGAGGTGAAGGTGGA	1320
1321	GAGTACAACGCTGTGGCCGACACACTGGAGATCATCAATGACACCATCAGGTCCAAGGA	1380
1381	TCCGAACCACCAAAGACAAGACCATCATCCTGGAGCAGCTGCCGAAGATCTCCCTACCT	1440
1441	CTCTACAGCATCCTCTCTGCCCTCACCATCCTCGGGATGATCATGGCCAGTGCTTTTCTC	1500
1501	TTCTTCAACATCAAGAACCGGAATCAGAAGCTCATAAAGATGTCGAGTCCATACATGAAC	1560
1561	AACCTTATCATCCTTGGAGGGATGCTTTCCCTATGCTTCCATATTTCTCTTTGGCCTTGAT	1620
1621	GGATCCTTTGTCTCTGAAAAGACCTTTTGAAACACTTTTGCACCGTCAGGACCTGGATTCTC	1680

FIGURE 22C

1681	ACCGTGGGCTACGACCGCTTTTGGGGCCATGTTTGCAAGACCTGGAGAGTCCACGCC	1740
1741	ATCTTCAAAAATGTGAAAATGAAGAAGAATCATCAAGGACCAGAAACTGCTTGTGATC	1800
1801	GTGGGGGGCATGCTGTGATCGACCTGTGTATCCTGATCTGCTGCGAGGCTGTGGACCCC	1860
1861	CTGCGAAGGACAGTGGAGAAAGTACAGCATGGAGCCGACCCAGCAGGACGGGATATCTCC	1920
1921	ATCCGCCCTCTCCTGGAGCACTGTGAGAACACCCATATGACCATCTGGCTTGGCATCGTC	1980
1981	TATGCCCTACAAGGGACTTCTCATGTTGTTTCGGTTGTTTCTTAGCTTGGGAGACCCGCAAC	2040
2041	GTCAGCATCCCCGCACTCAACGACAGCAAGTACATCGGGATGAGTGTCTACAACGTGGGG	2100
2101	ATCATGTGCATCATCGGGGGCCGCTGTCTCCTTCCCTGACCCGGGACCAGCCCAATGTGCAG	2160
2161	TTCTGCATCGTGGCTCTGGTCAATCATCTTCTGCAGCACCATCACCCCTCTGCCCTGGTATTC	2220
2221	GTGCCGAAGCTCATCACCCCTGAGAAACAAACCCAGATGCAGCAACGCAGAAACAGGCGATTC	2280
2281	CAGTTCACTCAGAAATCAGAAAGAAAGATTTCTAAAACGTCCACCTCGGTCAACAGTGTG	2340
2341	AACCAAGCCAGCACATCCCCGCCTGGAGGGCCCTACAGTCAGAAAACCATCGCCCTGCGAATG	2400
2401	AAGATCACAGAGCTGGATAAAGACTTGGAAAGAGGTCACCATGCAGCTGCAGGACACACCA	2460
2461	GAAAAGACCACCTACATTAAACAGAACCACTACCAAGAGCTCAATGACATCCTCAACCTG	2520

# FIGURE 22D

2521	GGAAACTTCACTGAGAGCACAGATGGAGGAAAGGCCATTTTAAAAATCACCTCGATCAA	2580
2581	AATCCCCAGCTACAGTGGAAACACAACAGAGCCCTCTCGAACATGCAAAGATCCTATAGAA	2640
2641	GATATAAACTCTCCAGAAACACATCCAGCGTCGGCTGTCCCTCCAGCTCCCCCATCCTCCAC	2700
2701	CACGCCCTACCTCCCATCCATCGGAGGCGTGGACGCCAGCTGTGTGTCAGCCCCCTGCCGTCAGC	2760
2761	CCCACCGCCAGCCCCCGCCACAGACATGTGCCACCCCTCCTTCCGAGTCATGGTCTCGGGC	2820
2821	<u>CTGTAA</u>	2826

**FIGURE 23A**

[illegible]



FIGURE 23B

281	I	P	G	W	Y	E	P	S	W	E	Q	V	H	T	E	A	N	S	S	300	
301	R	C	L	R	K	N	L	L	A	A	M	E	G	Y	I	G	V	D	F	E	320
321	P	L	S	S	K	Q	I	K	T	I	S	G	K	T	P	Q	Q	Y	E	R	340
341	E	Y	N	N	K	R	S	G	V	G	P	S	K	F	H	G	Y	A	Y	D	360
361	G	I	W	V	I	A	K	T	L	Q	R	A	M	E	T	L	H	A	S	S	380
381	R	H	Q	R	I	Q	D	F	N	Y	T	D	H	T	L	G	R	I	I	L	400
401	N	A	M	N	E	T	N	F	F	G	V	T	G	Q	V	V	F	R	N	G	420
421	E	R	M	G	T	I	K	F	T	Q	F	Q	D	S	R	E	V	K	V	G	440
441	E	Y	N	A	V	A	D	T	L	E	I	I	N	D	T	I	R	F	Q	G	460
461	S	E	P	P	K	D	K	T	I	I	L	E	Q	L	R	K	I	S	L	P	480
481	L	Y	S	I	L	S	A	L	T	I	L	G	M	I	M	A	S	A	F	L	500
501	F	F	N	I	K	N	R	N	Q	K	L	I	K	M	S	S	P	Y	M	N	520
521	N	L	I	I	L	G	G	M	L	S	Y	A	S	I	F	L	F	G	L	D	540
541	G	S	F	V	S	E	K	T	F	E	T	L	C	T	V	R	T	W	I	L	560

FIGURE 23C

561	T	V	G	Y	T	T	A	F	G	A	M	F	A	K	T	W	R	V	H	A	580
581	I	F	K	N	V	K	M	K	K	K	I	I	K	D	Q	K	L	L	V	I	600
601	V	G	G	M	L	L	I	D	L	C	I	L	I	C	W	Q	A	V	D	P	620
621	L	R	R	T	V	E	K	Y	S	M	E	P	D	P	A	G	R	D	I	S	640
641	I	R	P	L	L	E	H	C	E	N	T	H	M	T	I	W	L	G	I	V	660
661	Y	A	Y	K	G	L	L	M	L	F	G	C	F	L	A	W	E	T	R	N	680
681	V	S	I	P	A	L	N	D	S	K	Y	I	G	M	S	V	Y	N	V	G	700
701	I	M	C	I	I	G	A	A	V	S	F	L	T	R	D	Q	P	N	V	Q	720
721	F	C	I	V	A	L	V	I	I	F	C	S	T	I	T	L	C	L	V	F	740
741	V	P	K	L	I	T	L	R	T	N	P	D	A	A	T	Q	N	R	R	F	760
761	Q	F	T	Q	N	Q	K	K	E	D	S	K	T	S	T	S	V	T	S	V	780
781	N	Q	A	S	T	S	R	L	E	G	L	Q	S	E	N	H	R	L	R	M	800
801	K	I	T	E	L	D	K	D	L	E	E	V	T	M	Q	L	Q	D	T	P	820
821	E	K	T	T	Y	I	K	Q	N	H	Y	Q	E	L	N	D	I	L	N	L	840

FIGURE 23D

841	G	N	F	T	E	S	T	D	G	G	K	A	I	L	K	N	H	L	D	Q	860
861	N	P	Q	L	Q	W	N	T	T	E	P	S	R	T	C	K	D	P	I	E	880
881	D	I	N	S	P	E	H	I	Q	R	R	L	S	L	Q	L	P	I	L	H	900
901	H	A	Y	L	P	S	I	G	G	V	D	A	S	C	V	S	P	C	V	S	920
921	P	T	A	S	P	R	H	R	H	V	P	P	S	F	R	V	M	V	S	G	940
941	L																			941	